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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/652,655	08/28/2003	Zheng J. Li	PC11724E	5798
28523 .	7590 07/15/2005		EXAMINER	
PFIZER INC	- •	BERKO, RETFORD O		
PATENT DEPARTMENT, MS8260-1611 EASTERN POINT ROAD			ART UNIT	PAPER NUMBER
GROTON, CT 06340			1618	

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Anni	ination No	Amplicant(a)				
			ication No.	Applicant(s)				
Office Action Summary			52,655	LI J. ZHENG				
			niner	Art Unit				
Th - 0.00 II I	IC DATE -54bis		ord Berko	1618				
Period for Reply	NG DATE of this commun	ication appears o	n the cover sheet	with the correspondence a	igaress			
THE MAILING DA  - Extensions of time may after SIX (6) MONTHS  - If the period for reply s  - If NO period for reply within the control of th	s specified above, the maximum st	CATION. of 37 CFR 1.136(a). In nunication. 0) days, a reply within ti atutory period will apply will, by statute, cause t	no event, however, may he statutory minimum of t and will expire SIX (6) M he application to become	a reply be timely filed thirty (30) days will be considered time ONTHS from the mailing date of this ABANDONED (35 U.S.C. § 133)	nely. communication.			
Status								
1) Responsive	to communication(s) file	ed on <u>11 April 20</u>	<u>05</u> .					
2a) ☐ This action	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
•	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claim	s				-			
4a) Of the all 5) ☐ Claim(s) 6) ☑ Claim(s) <u>12</u> 7) ☐ Claim(s)	Claim(s) 124-143 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  Claim(s) is/are allowed.  Claim(s) 124-143 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or election requirement.							
Application Papers								
9) ☐ The specification is objected to by the Examiner.								
10)☐ The drawing	0) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
• •	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
'	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S	s.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
Attachment(s)			•					
1) Notice of References 2) Notice of Draftsperso	on's Patent Drawing Review (F re Statement(s) (PTO-1449 or		Paper N	w Summary (PTO-413) lo(s)/Mail Date of Informal Patent Application (P	TO-152)			

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#### **DETAILED ACTION**

**Acknowledgement**: Examiner acknowledges the Petition to make Special, filed 4/11/05. The Information Disclosure Statement filed 5/16/05 is also acknowledged.

### **Status of Claims**

Applicant' cancelled claims 1-123. The claims that remain for examination are 124-143.

#### **Joint Inventors**

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

## **Double Patenting**

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

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improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 124-133 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-10 and claims 13-31 of U.S. Patent No. 20040138149. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are drawn toward the same invention, i.e. crystalline azithromycin form F having specific <sup>13</sup>C –NMR spectral shift peaks and known wt/% of drug in the formulation.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 124-143 are rejected as unpatentable under 35 U.S.C. 103(a) over Singer et al (WO 00/32203) in view of Garcia et al (US 6, 528, 492).

Singer et al (WO '203) disclose process for manufacture of azithromycin crystals (abstract. According to the Singer, the method involving ethanol crystallization yields batch forms of crystals identified as Batches A, B, C, D, D, E, F and G (page 3, lin 20 and Table 1, at page 5), showing wt/% of each gas chromatographic from or batch of the drug. WO '203 discloses that ethanol in the presence of water, promotes crystallization ((page 3, lin 21).

WO '203 does not teach the chemical shift peaks of the forms of azithromycin.

Garcia et al (Patent '492) disclose a single-step process for making azithromycin, such form of drug having <sup>13</sup>C –NMR spectral shift peaks akin to the F form of azithromycin (col 2, lin 35-40 and figure 3. According to Garcia, the process yields azithromycin with superior qualities such as offering increased solubility and implied greater bioavailability over the forms of the drug reported to date (col 5, lin 60, continuing to col 6, lin 1-12).

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One of ordinary skill would have been motivated to prepare crystal forms of azithromycin as shown by Singer wherein a form F of the drug is obtained. By combining with Garcia's method of making the drug, one of ordinary skill would expect to obtain the F form of the drug that is shown to have highest solubility shown to date and thereby obtain improved bioavailability of the drug (Patent '492, col 6, lin 1-10). Therefore the invention as a whole would have been prima facie obvious to one of ordinary skill at the time it was made.

## Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Retford Berko** whose telephone number is571-272-0590. The examiner can normally be reached on M-F from 8.00 am to 5.30 pm

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Thurman K Page, can be reached on 571-272-0602.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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